2021 Consumer Confidence Report

Water System Information

Water System Name: Soda Bay CSA-20

Report Date: June 28, 2022

Type of Water Source(s) in Use: Surface Water

Name and General Location of Source(s): Clear Lake; Intake screen located 600 feet offshore.

Drinking Water Source Assessment Information: Drinking water assessment, January 2003. The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply: Agricultural drainage, Historic mining operations. The source is considered most vulnerable to the following activities NOT associated with contaminants detected in the water supply: Managed forests, Lake recreation. For a copy contact Lake County Special Districts at (707) 263-0119.

Time and Place of Regularly Scheduled Board Meetings for Public Participation: Lake County Board of Supervisors regular meeting at 9:00 a.m. on the first four Tuesdays of each month, 255 N. Forbes Street, Lakeport, Ca 95453.

For More Information, Contact: Scott Hornung, Deputy Administrator.

About This Report

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 to December 31, 2021 and may include earlier monitoring data.

Importance of This Report Statement in Non-English Language - Spanish

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Soda Bay CSA-20 a 230 N. Main Street, Lakeport, Ca 95453 para asistirlo en español.

Terms Used in This Report

Term	Definition
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an <i>E. coli</i> MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Term	Definition
Maximum Contaminant Level (MCL)	The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
Maximum Contaminant Level Goal (MCLG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (U.S. EPA).
Maximum Residual Disinfectant Level (MRDL)	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfectant Level Goal (MRDLG)	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Primary Drinking Water Standards (PDWS)	MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
Public Health Goal (PHG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Secondary Drinking Water Standards (SDWS)	MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.
Treatment Technique (TT)	A required process intended to reduce the level of a contaminant in drinking water.
Variances and Exemptions	Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.
ND	Not detectable at testing limit.
ppm	parts per million or milligrams per liter (mg/L)
ppb	parts per billion or micrograms per liter (µg/L)
ppt	parts per trillion or nanograms per liter (ng/L)
ppq	parts per quadrillion or picogram per liter (pg/L)
pCi/L	picocuries per liter (a measure of radiation)

Sources of Drinking Water and Contaminants that May Be Present in Source Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

Regulation of Drinking Water and Bottled Water Quality

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

About Your Drinking Water Quality

Drinking Water Contaminants Detected

Tables 1, 2, 3, 4, 5, 6, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

Table 1. Sampling Results Showing the Detection of Coliform Bacteria

Complete if bacteria are detected.

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
E. coli	(In the year) 0	0	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

Table 1.A. Compliance with Total Coliform MCL between January 1, 2021 and June 30, 2021 (inclusive)

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a month) 0	0	1 positive monthly sample (a)	0	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	(in the year) 0	0	0	None	Human and animal fecal waste

⁽a) For systems collecting fewer than 40 samples per month: two or more positively monthly samples is a violation of the total coliform MCL

Table 2. Sampling Results Showing the Detection of Lead and Copper

Complete if lead or copper is detected in the last sample set.

Lead and Copper	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	10-14-2020	10	ND	1	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	10-14-2020	10	0.73	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 3. Sampling Results for Sodium and Hardness

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	4-16-2020	12	N/A	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	4-16-2020	137	N/A	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Table 4. Detection of Contaminants with a Primary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Arsenic (ug/L)	5-4-2021	2.4	N/A	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (mg/L)	5-4-2021	0.12	N/A	1	2	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride	5-4-2021	0.13	N/A	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories

TTHMs (Total Trihalomethanes) (ug/L)	1-19-2021 4-20-2021 7-20-2021 10-18-2021	36.3	8.63-52.53	80	N/A	Byproduct of drinking water disinfection
HAA5 (Sum of 5 Haloacetic Acids) (ug/L)	1-19-2021 4-20-2021 7-20-2021 10-18-2021	37.35	8.5 -61.1 *	60	N/A	Byproduct of drinking water disinfection

Table 5. Detection of Contaminants with a Secondary Drinking Water Standard

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Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Color (units)	4-16-2020	17*	N/A	15	N/A	Naturally-occurring organic materials
Iron (ug/L)	4-16-2020	110	N/A	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (ug/L)	4-16-2020	40	N/A	50	N/A	Leaching from natural deposits
Odor (units)	4-16-2020	20*	N/A	3	N/A	Naturally-occurring organic materials
Sulfate (mg/L)	4-16-2020	7	N/A	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Chloride (mg/L)	4-16-2020	6.9	N/A	500	N/A	Runoff/leaching from natural deposits; seawater influence
Total Dissolved Solids (mg/L)	4-16-2020	140	N/A	1000	N/A	Runoff/leaching from natural deposits
Specific Conductance (µS/cm)	4-16-2020	290	N/A	1600	N/A	Substances that form ions when in water; seawater influence

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
Boron (mg/L)	5-4-2021	1.3	N/A	1	Boron exposure resulted in decreased fetal weight (developmental effects) in newborn rats.

Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Lead-Specific Language: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Soda Bay CSA No. 20 is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/lead.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the U.S. EPA Safe Drinking Water Hotline (1-800-426-4791).

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2021. These revisions add the requirements of the federal Revised Total Coliform Rule, effective since April 1, 2016, to the existing state Total Coliform Rule. The revised rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The U.S. EPA anticipates greater public health protection as the rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system. The state Revised Total Coliform Rule became effective July 1, 2021.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
Lead (ppb)	One site had a lead level of 40 ppb, which is above the Action Level. This is a new testing site with a house that was built in 1980 prior to the ban of lead solder. All other sites sampled were non-detect for lead.	One of the ten sites tested were above the Action Level.	This is an issue with the internal plumbing of the residence. Information was provided to the owner as well as the link to the USEPA's Safe Drinking Water website, that provides information and steps to reduce exposure to lead and copper in drinking water.	Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.
HAA5 (Sum of 5 Haloacetic Acids)	Poor lake quality due to low lake levels and drought	One instance	Increase use of Ozone	Some people who drink water containing Haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Color – Secondary DWS MCL	Poor lake quality due to low lake levels and drought	One instance	Sample is of raw water prior to treatment. Water	Regulated contaminants with secondary MCL's have no mandatory

			was treated prior to distribution.	health effects language as they are set on the basis of aesthetics.
Odor	Poor lake quality due to low lake levels and drought	One instance	Sample is of raw water prior to treatment. Water was treated prior to distribution.	Regulated contaminants with secondary MCL's have no mandatory health effects language

For Systems Providing Surface Water as a Source of Drinking Water

Table 10. Sampling Results Showing Treatment of Surface Water Sources

Treatment Technique (a) (Type of approved filtration technology used)	Mixed media, rapid sand filtration		
Turbidity Performance Standards (b) (that must be met through the water treatment process)	Turbidity of the filtered water must:		
	1 – Be less than or equal to 0.2 NTU in 95% of measurements in a month.		
	2 – Not exceed 1.0 NTU for more than eight consecutive hours.		
	3 - Not exceed 5.0 NTU at any time.		
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%		
Highest single turbidity measurement during the year	0.20		
Number of violations of any surface water treatment requirements	0		

⁽a) A required process intended to reduce the level of a contaminant in drinking water.

Summary Information for Violation of a Surface Water TT

Table 11. Violation of Surface Water TT

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
N/A	N/A	N/A	N/A	N/A

⁽b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Summary Information for Operating Under a Variance or Exemption

N/A

Source Water Protection and Water Conservation Tips for Consumers

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to
 the street drain reminding people "Dump No Waste Drains to River" or "Protect Your Water". Produce and
 distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers a 5 minutes shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair, and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a
 month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaking toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!

Visit https://www.epa.gov/watersense for more information.